WHAT IS CLAIMED IS:

1. A light stable hydrophobic polyurethane elastomer comprising:

A) An isocyanate terminated prepolymer having an isocyanate content ranging from 4 to 12 wt.% NCO comprising the reaction product of:

i) an OH terminated homopolymer of butadiene having a molecular weight ranging from 1000 to 4000 and an OH functionality of from 1.9 to 2.1; and

ii) an aliphatic or cycloaliphatic diisocyanate.

B) A diol chain extender having a molecular weight ranging from 62 to 400.

2. The elastomer according to Claim 1 wherein said homopolymer of butadiene is dihydroxyl terminated polybutadiene.

3. The elastomer according to Claim 1, wherein said dihydroxyl terminated polybutadiene is represented by the formula:

$HO[CH_2\text{-}CH{=}CH(CH_2)_2\text{-}CH{=}CH\text{-}CH_2]_nCH_2\text{-}CH{=}CH\text{-}CH_2OH$,

wherein n is a number average value from about 8 to 36.

4. The elastomer according to Claim 1, wherein said aliphatic or cycloaliphatic diisocyanate is selected from the group consisting of 1,4-tetramethylene diisocyanate, 1,6-hexamethylene diisocyanate, 2,2,4-trimethyl-1,6-hexamethylene diisocyanate, 1,12-dodecamethylene diisocyanate, cyclohexane-1,3- and -1,4-diisocyanate, 1-isocyanato-2-isocyanatomethyl cyclopentane, 1-isocyanato-3-isocyanatomethyl-3,5,5-trimethyl-cyclohexane (isophorone diisocyanate or IPDI), bis-(4-isocyanatocyclohexyl)-methane, 2,4'-dicyclohexylmethane diisocyanate, 1,3- and 1,4-bis-(isocyanatomethyl)-cyclohexane, bis-(4-isocyanato-3-methylcyclohexyl)-methane, $\alpha,\alpha,\alpha',\alpha'$-tetramethyl-1,3- and/or -1,4-xylylene diisocyanate, 1-isocyanato-1-methyl-4(3)-isocyanatomethyl cyclohexane, 2,4- and/or 2,6-hexahydrotoluylene diisocyanate and 4,4'-dicyclohexyl-methanediisocyanate (rMDI).

5. The elastomer according to Claim 4, wherein said aliphatic or cycloaliphatic diisocyanate is 1-isocyanato-3-isocyanatomethyl-3,5,5-trimethyl-cyclohexane.

6. The elastomer according to Claim 4, wherein said aliphatic or cycloaliphatic diisocyanate is 4,4'-dicyclohexylmethane-diisocyanate.

7. The elastomer according to Claim 6, wherein said 4,4' -dicyclohexylmethanediisocyanate contains about 23% by weight *trans*,*trans*, 49% by weight *cis*,*trans*, and 28% by weight *cis*,*cis* isomer.

8. The elastomer according to Claim 1, wherein said chain extender is selected from the group consisting of 1,6-hexane-diol, 1,8-octanediol, 2,2,4-trimethylpentane 1,3-diol, 2-methyl-1,3-propanediol, ethylene glycol, diethylene glycol, dipropylene glycol, 1,4-butanediol, terephthalic acid bis(ethylene glycol), terephthalic acid bis(1,4-butanediol), 1,4-di(hydroxyethyl) hydroquinone, ethoxylated bisphenols, isophorone-diamine, ethylenediamine, 1,2-propylenediamine, 1,3-propylenediamine, N-methylpropylene-1,3-diamine, N,N'-dimethyl ethylenediamine, 2,4-tolylenediamine, 2,6-tolylenediamine, 3,5-diethyl-2,4-tolylenediamine, 3,5-diethyl-2,6-tolylenediamine and primary mono-, di-, tri- or tetraalkyl-substituted 4,4'-diaminodiphenylmethanes.

9. The elastomer according to Claim 8, wherein said chain extender is 1,4-butanediol.

10. The elastomer according to Claim 1, wherein said hydroxyl terminated butadiene has an OH functionality ranging from 1.95 to 2.0.

11. The elastomer according to Claim 1, wherein said isocyanate terminated prepolymer and said chain extender are combined at an NCO/OH index of between 50 and 150.